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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,116	03/06/2002	Heume Il Baek	041501-5489	5138

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EXAMINER

NGUYEN, JIMMY H

ART UNIT PAPER NUMBER

2673

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,116

Applicant(s)

BAEK, HEUME IL

Examiner

Jimmy H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,8,9,12,14 and 16-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6,8,9,12,14,16 and 17 is/are allowed.
- 6) ☒ Claim(s) 18-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is made in response to applicant's amendment filed on 10/11/2005. Claims 6, 8, 9, 12, 14, and 16-23 are currently pending in the application. An action follows below:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 18 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kimura (JP 2000-193936). See the English translation attached in the Office Action dated 3/25/2004, for the following rejections.

As per claims above, the claimed invention reads on Kimura as follows: Kimura discloses a LCD device (fig. 1) comprising a gamma reference voltage generating circuit (an output section 45, see Fig. 2) comprising a DC-to-DC converter (a reference potential generating section 46, see Fig. 2) to generate a first voltage (a voltage is provided to an input terminal A1 of a selection circuit 47, see Fig. 2) and a second voltage (a voltage is provided to an input terminal B2 of a selection circuit 47, see Fig. 2); a switch (a selection circuit 47, see Fig. 2) to select the first voltage in a reflective driving mode of the LCD (see paragraph [0115] of the English translation) and the second voltage in a transmissive driving mode of the LCD (see paragraph [0115] of the English translation); a first common power unit (a unit including a top element 48 and its connections, as shown in Fig. 2) to receive the first voltage via an output terminal "A" of

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the selection circuitry 47 and output a first common voltage (V_0) when the first voltage is selected by the switch (47); and a second common power unit (a unit including a second element 48 and its connections, as shown in Fig. 2) to receive the second voltage via an output terminal "B" of the selection circuitry 47 and output the second common voltage (V_1) when the second voltage is selected by the switch (47). See paragraphs [0120] and [0121]. Kimura further teaches the switching unit (47) synchronized with an ON/OFF state of the light source 21 (corresponding to the claimed backlight source) of the LCD (see fig. 1, abstract, page 15, paragraphs [0111] - [0114]). Accordingly, the elements and the steps in the claim are read in the Kimura reference.

4. Claims 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamei et al. (US 5,640,174), hereinafter Kamei.

As per claims above, the claimed invention reads on Kamei as follows: Kamei discloses a LCD device (see fig. 1) comprising a gamma reference voltage generating circuit (a circuit including all elements as shown in Fig. 1 except elements 10, 11, and LCD panel) an output section 45, see Fig. 2) comprising a DC-to-DC converter (a circuit including elements V_s , V_c , 4, and 5, see Fig. 1) to generate a first voltage ($+V_1$) and a second voltage ($-V_1$); a switch (a circuit including elements 6-8, see Fig. 1) to select the first voltage and the second voltage; a first common power unit (a unit including elements R_1 - R_n and connections as shown in Fig. 1) to receive the first voltage ($+V_1$) and to output a first common voltage (V_1 , see Fig. 1) when the first voltage ($+V_1$) is selected by the switch (6-8); a second common power unit (a unit including elements R_1' - R_n' and connections as shown in Fig. 1) to receive the second voltage ($-V_1$) and to output a second common voltage (V_1' , see Fig. 1) when the second voltage ($-V_1$) is selected by the switch (6-8); a first gamma power unit (a unit including elements R_1 - R_n and connections as

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shown in Fig. 1) to receive the first voltage (+V1) and to output a first gamma voltage (V2, see Fig. 1) when the first voltage (+V1) is selected by the switch (6-8); a second gamma power unit (a unit including elements R1'-Rn' and connections as shown in Fig. 1) to receive the second voltage (-V1) and to output a second gamma voltage (V2', see Fig. 1) when the second voltage (-V1) is selected by the switch (6-8); and a buffer (9) buffering the first gamma voltage (V2) and outputting the buffered voltage (V2) to a source driving circuit (a drain driver 10, see Fig. 1). Accordingly, the elements and the steps in the claim are read in the Kamei reference.

Allowable Subject Matter

5. Claims 6, 8, 9, 12, 14, 16, and 17 are allowed. See the statement of reasons for the indication of allowable subject matter in the Office Action dated 3/25/2004.

Response to Arguments

6. Applicant's arguments, see pages 8-9 of the amendment, filed 10/11/2005, with respect to the rejections to claims 9, 12, 14, 16, and 17, in the Office Action dated 07/12/2005, have been fully considered and are persuasive in light of the amendments to independent claims 9 and 14. The rejections to these claims in the Office Action dated 07/12/2005 have been withdrawn.

7. In response to the applicants' assertion on page 10 of the amendment filed 10/11/06, examiner directs the applicants to the rejections above.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is 571-272-7675. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JHN
January 19, 2006



Jimmy H. Nguyen
Primary Examiner
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